Docket No. SA-537

Exhibit No. 6-P

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Air Cruisers Service Bulletin 777 107-25-30

(20 Pages)



1747 State Route 34, Wall Township, NJ 07727-3935 Tel (732) 681-3527, CAGE Code 70167



SERVICE BULLETIN REVISION NOTICE

Revision 3 of Service Bulletin 777 107-25-30 is issued to add FAA AD 2013-05-10 to the compliance paragraph. Revised paragraphs 1.B and 2.A to emphasize that housing does not have to be replaced if inspection is acceptable. Paragraph 1.B has also been revised to indicate that the new Release Housing part number 68737-101 is blue in color.

Please discard Service Bulletin 777 107-25-30, Rev No. 2 dated 27 Jul 2012 now in your possession, and replace with the attached Service Bulletin 777 107-25-30 Revision No. 3, dated TBD.

Revision	Date
Original Issue	30 Sep 2010
Rev. No. 1	11 Nov 2011
Rev. No. 2	27 Jul 2012
Rev. No. 3	19 Jul 2013

AIR CRUISERS

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SERVICE BULLETIN

EQUIPMENT FURNISHINGS - EMERGENCY EQUIPMENT 777 EVACUATION SLIDE/RAFT SYSTEMS INSPECTION AND REPLACEMENT OF PACKBOARD HOUSING ASSEMBLY

1. Planning Information

A. Effectivity

Slide/Raft Evacuation Systems

62771-101, -102, -103, -104, -105, -106, -107, -108, -109, -110, -111, -112, -113, -114, -115, -116, -117, -118, -119, -120, -121, -122, -123, -124; Prior to S/N 2781, except 2524, 2731, 2737 through 2749, 2751, 2752, and 2756 through 2776

62772-201, -202, -203, -204, -205, -206, -207, -208, -209, -210, -211, -212,

-213, -214, -215, -216, -221, -222, -223, -224; Prior to S/N 1212

 $62773\text{-}301, \ -302, \ -303, \ -304, \ 309, \ -310, \ -311, \ -312, \ -313, \ -314, \ -315, \ -316,$

317, -318, -319, -320, -325, -326, -327, -328; Prior to S/N 1294

 $62774\text{-}401, \, -402, \, -403, \, -404, \, -405, \, -406, \, -407, \, -408, \, -409, \, -410, \, -411, \, -412, \\$

-413, -414, -415, -416, -421, -422, -423, -424; Prior to S/N 1340

63604-305, -306, -307, -308, -321, -322, -323, -324, -329, -330, -331, -332;

Prior to S/N 0730, except 0688 and 0728

65342-217, -218, -219, -220; Prior to S/N 0117, except 0114

65344-417, -418, -419, -420; S/N 0711 and prior to S/N 0694, except 0687, 0689, and 0690

Packboard Assemblies

61949-101, -102, -103, -104, -105, -106, -107, -108

61999-101, -102, -103, -104, -105, -106, -107, -108

65720-101, -102; Prior to S/N 5756, except 5133, 5137, 5514, 5515, 5533, 5536 through 5539, 5557, 5558, 5562, 5565, 5572, 5574, 5577, 5579, 5583, 5584, 5586, 5589, 5592, 5595, 5616, 5617, 5619, 5625, 5633 through 5639, 5646, 5648 through 5650, 5658, 5659, 5661 through 5665, 5667 through 5669, 5671 through 5677, 5683 through 5686, 5691, 5692, 5694, 5696, 5697, 5699, 5700, 5703, 5709, 5715, 5716, 5718, 5719, 5721, 5728, 5731, 5732, and 5738 65988-101, -102; Prior to S/N 5705, except 5513, 5515, 5516, 5521, 5594, 5598, 5605, 5606, 5620, 5627, 5630, 5632, 5670, and 5695

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B. Reason

Housing assemblies supplied with "unsealed" anodize may exhibit excessive levels of corrosion, which can affect release assembly functionality.

This Service Bulletin is intended to provide material and instructions to inspect, and if necessary, remove the existing housing assembly (P/N 61995-101, with "unsealed" Type III Anodize) from the system packboard and replace with new housing assembly (P/N 68737-101, with "sealed" Type III Anodize). The new housing assembly P/N 68737-101 is bright blue in color for easy identification.

C. Compliance

It is mandatory that this service bulletin be incorporated within 42 months after May 3, 2013 to comply with FAA AD 2013-05-10.

D. Description

Inspect, and if necessary, remove release assembly from packboard. If necessary, remove pin shield, tang, spring pins, and shaft from release assembly. Remove/replace housing assembly. Re-assemble release assembly and re-install on packboard assembly.

E. Approval

<u>Certification, TSO-C69b or TSO-C69c</u> (as applicable) - This Service Bulletin contains modification information which has been submitted to the FAA under the TSO-C69b or TSO-C69c (as applicable) authorization for the affected articles.

F. Labor Hours

It will take approximately 0.5 hour per system to accomplish the instructions outlined in this Service Bulletin.

G. Material - Cost and Availability

EDR kit 90-1500-101 is available free of charge after the receipt of a no charge purchase order which lists the serial number of the end item and the serial number of the packboard. The kit will be available free of charge for four (4) years from the date of manufacture of the system.

Pin Set Tool 68756-1 is available, one per customer, free of charge during the warranty period.

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For systems out of warranty the EDR Kit will be available for a price of \$137.00. Pin Set Tool, 68756-1, will be available for a price of \$35.00. The purchase order must list the serial number of the end item and the serial number of the packboard.

Kits and Pin Set Tool are available from your local authorized Zodiac Services distributor. Please contact Zodiac Services Europe (CAGE code FAUX0), Zodiac Aerospace UK (CAGE code U03Z8), Zodiac Services Americas (CAGE code 567V9), In-Services Middle East (CAGE code SFB76), or Zodiac Services Asia (CAGE code QC054).

- H. Tooling Commercially Available
 Punch Set, Hammer, Assorted Wrenches, Pliers,
 Phillips Screwdriver, Shop Towel
- I. Weight and Balance None
- J. Electrical Load Data Not affected
- K. References Engineering Change Notices (ECNs) MC18,168 and 61995 Revision H.
- L. Other Publications Affected

Component Maintenance Manuals 25-61-31, 25-61-32, 25-61-33, 25-61-34, 25-61-35, 25-61-40, and 25-61-41 will require a revision to incorporate this Service Bulletin.

M. Family Tree Charts of Modification Relationships - None

2. Accomplishment Instructions

NOTE: All slide/rafts within the fleet shall be inspected to determine whether replacement of the housing assembly is required. The procedure shall consist of a visual inspection whereby the three main components of the housing assembly (the bottom housing and the two side housings) are examined. The color of the anodized finish is used as a means of distinguishing between sealed and unsealed parts. Any housing assembly with Type III unsealed components shall be replaced in accordance with this Service Bulletin. In addition, any housing assemblies exhibiting excessive corrosion on aluminum sub-components shall be replaced.

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NOTE: Reference Figure 1 and 2 for differentiation between sealed and unsealed component colors.

In some instances, housing assemblies may have been provided with a combination of both sealed and unsealed components. In such cases, replacement of the housing assembly is required.

NOTE: The new housing assembly P/N 68737-101 is blue in color for easy identification. If this is installed, housing replacement is not necessary unless damage is evident.

NOTE: Packboard is considered removed from system as part of regularly scheduled maintenance.

A. If housing assembly replacement is necessary, for 61949-Series and 61999-Series packboards, remove the ten (10) screws (MS51957-45) and ten (10) washers (MS35333-72) that secure the release assembly (61988-101) to the packboard. Remove release assembly (61988-101) from the packboard. Reference Figure 3.

For 65720-Series and 65988-Series packboards, remove the ten (10) screws (MS24693C53), ten (10) washers (MS35333-72), and ten (10) nuts (MS21083C08) that secure the release assembly (61988-101 or 61988-103) to the packboard. Remove release assembly (61988-101 or 61988-103) from the packboard. Discard nuts (MS21083C08). Reference Figure 4.

NOTE: The remainder of the disassembly procedure is most easily accomplished with the release assembly (61988-101 or 61988-103) held securely in a padded vise.

- B. Remove and discard sixteen (16) screws (MS51957-13) and sixteen (16) washers (MS35338-135) that secure each pin shield (62007-1, 62007-2) to the rear support (61997-1). Reference Figures 5and 6, Section A-A.
- C. Remove and discard the spring pin (MS171496) that is used to secure the tang (62006-1) to the release assembly shaft (61996-101). Reference Figures 5 and 7, Section E-E.

CAUTION: PLACE A SHOP TOWEL BETWEEN THE PLIERS AND THE RELEASE ASSEMBLY IN ORDER TO MINIMIZE SCRATCHING OF THE RELEASE ASSEMBLY COMPONENTS.

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- (1). To remove the spring pin, use a hammer and punch to start the pin out of the shaft, then use pliers to pull the pin free from the shaft.
- D. Remove and discard the remaining sixteen (16) spring pins (MS171532) from the release assembly shaft (61996-101). Reference Figure 5.

CAUTION: PLACE A SHOP TOWEL BETWEEN THE PLIERS AND THE RELEASE ASSEMBLY IN ORDER TO MINIMIZE SCRATCHING OF THE RELEASE ASSEMBLY COMPONENTS.

CAUTION: IF ANY OF THE SPRING PIN HOLES IN THE RELEASE ASSEMBLY SHAFT ARE ENLARGED OR DAMAGED WHILE REMOVING THE SPRING PINS, THE RELEASE ASSEMBLY SHAFT SHALL BE DISCARDED AND REPLACED. REFERENCE FIGURE 6.

- (1). To remove the spring pins, use a hammer and punch to start each pin out of the shaft, then use pliers to pull each pin free from the shaft.
- E. Slide the release assembly shaft (61996-101) out of the rear support (61997-1). Reference Figure 4.
- F. Remove the four (4) screws (MS51958-62) and four (4) nuts (MS21083C3) that secure the housing assembly (61995-101) to the rear support (61997-1) and remove the housing assembly from the rear support. Discard nuts (MS21083C3). Reference Figure 7.
- G. Install new housing assembly (68737-101) onto the rear support (61997-1) using four (4) existing screws (MS51958-62) and four (4) new nuts (MS21083C3). Reference Figure 7.

NOTE: Ensure the eight (8) bushings (B16865-1) are properly installed in the rear support (61996-101). Reference Figure 6.

NOTE: Slots in spring pins shall be oriented outward. Reference Figure 6.

- H. Install release assembly shaft (61996-101) into rear support (61997-1) and install sixteen (16) new spring pins (MS171532) using pin set tool 68756-1 and hammer. Reference Figures 6and 8.
- I. Install tang (62006-1) into release assembly shaft (61996-101) using new spring pin (MS171496). Reference Figure 7.

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- J. Install pin shields (62007-1, 62007-2) onto rear support (61997-1) using sixteen (16) new screws (MS51957-13) and sixteen (16) new washers (MS35338-135). Reference Figures 5 and 6, Section A-A.
- K. For 61949-Series or 61999-Series packboards, install release assembly (61988-101) onto packboard using ten (10) existing screws (MS51957-45) and ten (10) existing washers (MS35333-72). Reference Figure 3. For 65720-Series and 65988-Series packboards, install release assembly (61988-101 or 61988-103) onto packboard using ten (10) existing screws (MS24693C53), ten (10) existing washers (MS35333-72), and ten (10) new nuts (MS21083C08). Reference Figure 3.
- L. Check the pawl and release assembly shaft for smooth rotation and proper operation.
- M. Mark "Inspected and/or Mod per S.B. 777 107-25-30" in minimum 1/4 In. (6.4 mm) characters with indelible ink adjacent the system identification placards on the girt assembly and upper lacing cover.





SYSTEM	PART NO.	СММ	FOLDING PROCEDURE	PACKBOARD ASSEMBLY	EXISTING HOUSING ASSEMBLY	NEW HOUSING ASSEMBLY
777 Door 1, L.H.	62771-101, -103, -105, -107, -109, -111, -113, -115, -117, -119, -121, -123	25-61-31	P-12051	61949-(), 65720-()	61995-101	68737-101
777 Door 1, R.H.	62771-102, -104, -106, -108, -110, -112, -114, -116, -118, -120, -122, -124	25-61-31	P-12061	61949-(), 65720-()	61995-101	68737-101
777 Door 2, L.H.	62772-201, -203, -205, -207, -209, -211, -213, -215, -221, -223	25-61-32	P-12052	61949-(), 65720-()	61995-101	68737-101
777 Door 2, R.H.	62772-202, -204, -206, -208, -210, -212, -214, -216, -222, -224	25-61-32	P-12062	61949-(), 65720-()	61995-101	68737-101
777 Door 3, L.H.	62773-301, -303, -309, -311, -313, -315, -317, -319, -325, -327	25-61-33	P-12053	61949-(), 65720-()	61995-101	68737-101
777 Door 3, R.H.	62773-302, -304, -310, -312, -314, -316, -318, -320, -326, -328	25-61-33	P-12063	61949-(), 65720-()	61995-101	68737-101
777 Door 4, L.H.	62774-401, -403, -405, -407, -409, -411, -413, -415, -421, -423	25-61-34	P-12054	61999-(), 65988-()	61995-101	68737-101
777 Door 4, R.H.	62774-402, -404, -406, -408, -410, -412, -414, -416, -422, -424	25-61-34	P-12064	61999-(), 65988-()	61995-101	68737-101

TABLE 1 (SHEET 1 of 2)

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SYSTEM	PART NO.	СММ	FOLDING PROCEDURE	PACKBOARD ASSEMBLY	EXISTING HOUSING ASSEMBLY	NEW HOUSING ASSEMBLY
777-300 Door 4, L.H.	63604-305, -307, -321, -323, -329, -331	25-61-35	P-12105	61949-(), 65720-()	61995-101	68737-101
777-300 Door 4, R.H.	63604-306, -308, -322, -324, -330 -332	25-61-35	P-12106	61949-(), 65720-()	61995-101	68737-101
777-200LR/-300ER Door 4 / Door 5, L.H.	65344-417, -419	25-61-40	P-12237	61999-(), 65988-()	61995-101	68737-101
777-200LR/-300ER Door 4 / Door 5, R.H.	65344-418, -420	25-61-40	P-12238	61999-(), 65988-()	61995-101	68737-101
777-200LR Door 2, L.H.	65342-217, -219	25-61-41	P-12289	65720-()	61995-101	68737-101
777-200LR Door 2, R.H.	65342-218, -220	25-61-41	P-12288	65720-()	61995-101	68737-101

TABLE 1 (SHEET 2 of 2)





3. Material information

A. The EDR kit listed below contains items to modify one each 777 Slide/Raft packboard assembly.

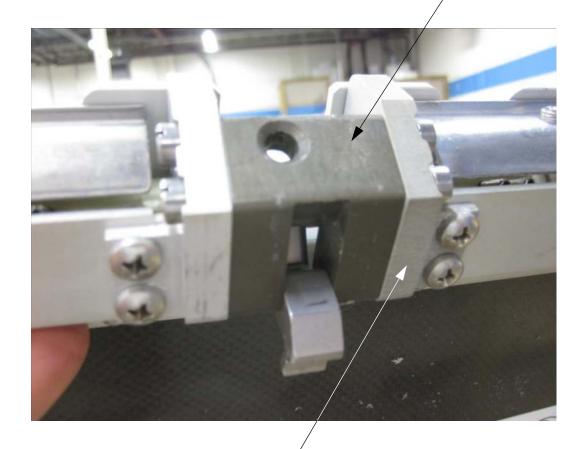
NEW P/N	QTY.	UNIT LIST PRICE	KEY WORD	OLD P/N	DISPOSITION
EDR 90-1500-101	1	*	Kit	-	
Consisting of:					
68737-101	1	-	Housing Assembly	61995-101	Install per this Service Bulletin
MS51957-13	16	-	Screw, Machine, Pan Head	MS51957-13	Install per this Service Bulletin
MS35338-135	16	-	Washer, Lock	MS35338-135	Install per this Service Bulletin
MS21083C08	10	-	Nut, Self-Locking	MS21083C08	Install per this Service Bulletin
MS21083C3	4	-	Nut, Self-Locking	MS21083C3	Install per this Service Bulletin
MS171496	1	-	Spring Pin	MS171496	Install per this Service Bulletin
MS171532	16	-	Spring Pin	MS171532	Install per this Service Bulletin

^{*} See Paragraph 1.G.





TYPE III "UNSEALED" ANODIZE IDENTIFIED BY DARK FINISH 7

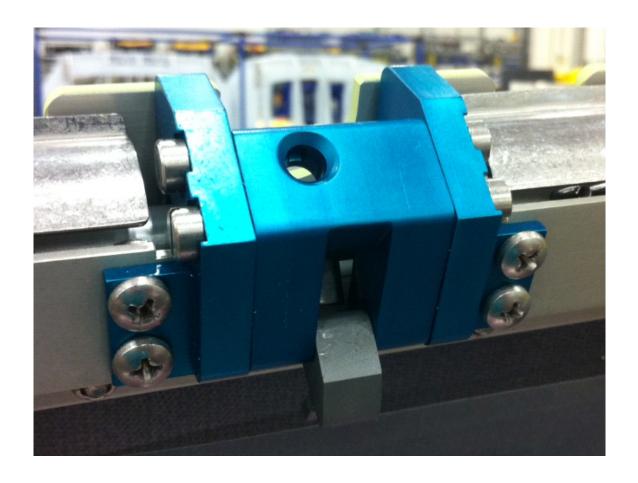


TYPE II "SEALED" ANODIZE IDENTIFIED BY LIGHT, NATURAL FINISH

"SEALED" AND "UNSEALED" COMPONENTS FIGURE 1





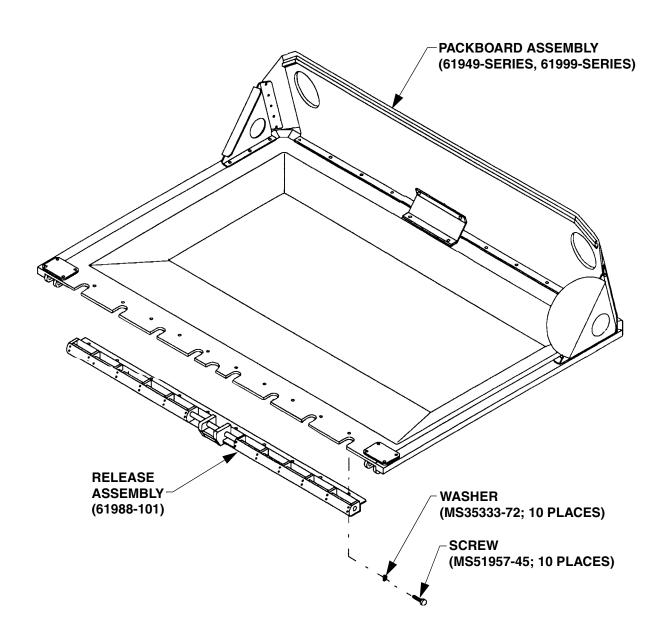


NEW "BLUE" HOUSING ASSEMBLY P/N 68737-101
NO NEED TO REPLACE IF INSTALLED
FIGURE 2

NOTE: Variations in the shade of blue are typical and acceptable.



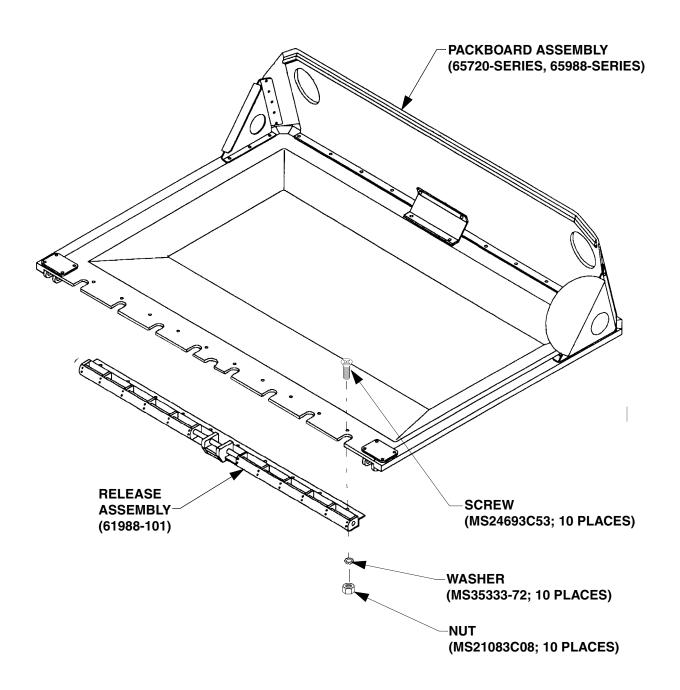




REMOVE/INSTALL RELEASE ASSEMBLY (PACKBOARD ASSEMBLY 61949-SERIES, 61999-SERIES) FIGURE 3





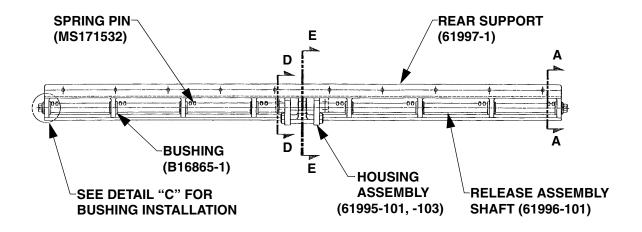


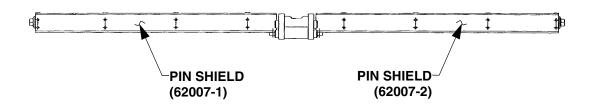
REMOVE/INSTALL RELEASE ASSEMBLY (PACKBOARD ASSEMBLY 65720-SERIES, 65988-SERIES) FIGURE 4

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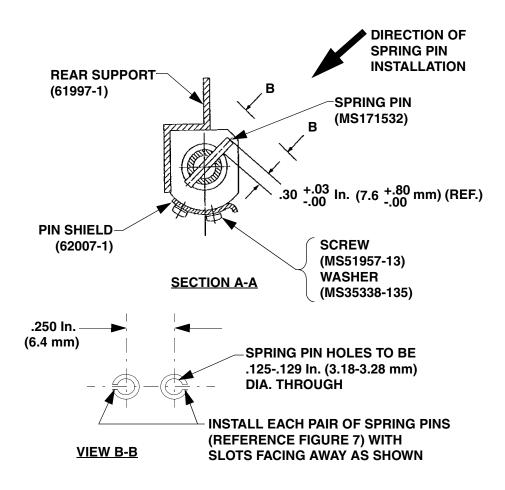


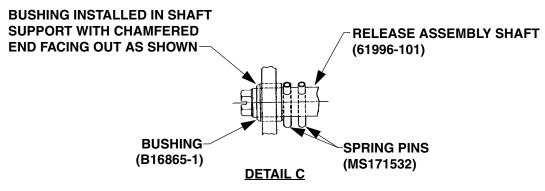


RELEASE ASSEMBLY FIGURE 5





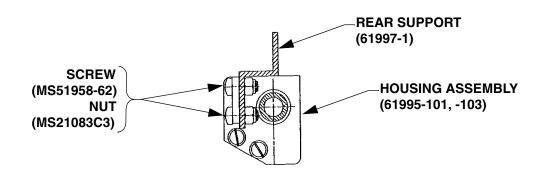




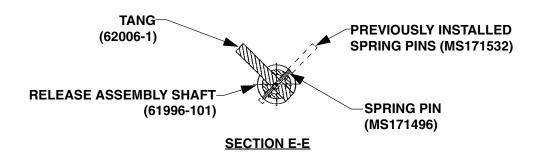
RELEASE ASSEMBLY FIGURE 6







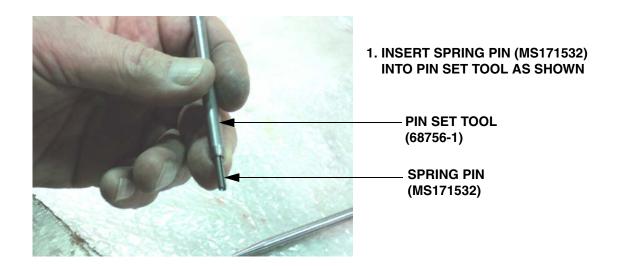
SECTION D-D

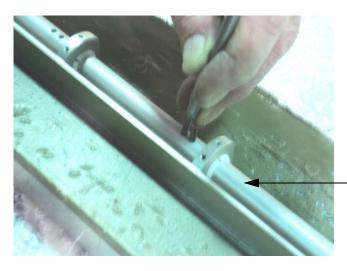


RELEASE ASSEMBLY FIGURE 7









- 2. GUIDE SPRING PIN (MS171532) INTO HOLE OF RELEASE ASSEMBLY SHAFT (61996-101)
- 3. TAP PIN SET TOOL WITH HAMMER UNTIL TOOL COMES IN CONTACT WITH RELEASE ASSEMBLY SHAFT

RELEASE ASSEMBLY SHAFT (61996-101)

SPRING PIN (MS171532) INSTALLATION FIGURE 8